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## CATTLE HIDES AND SHOE PRICES

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*Abstract: Cattle hide prices more than doubled between August 1971 and June 1972. To restrain the impact on retail shoe prices, the U.S. Government imposed strict regulations on tanner, shoe-maker, and retailer markups and invoked cattle hide export limits. Data on leather tanning and the cost of manufacturing men's oxford shoes indicate a hide price change of 1 cent per pound increases side-upper shoe leather material costs 1.46 cents per square foot. Therefore the recent sharp hide price increase would have increased the cost of leather in a pair of men's oxford shoes by 66 to 75 cents, or 5-7 percent of factory selling prices.*

*Key Words: Cattle hides, leather tanning, shoe manufacturing, marketing spreads.*

Domestic cattle hide prices more than doubled between August 1971 and June 1972. Continued strong world demand for leather, a sharp drop in Argentina's exports, and discontinued U.S. production of 2 major synthetic substitutes in 1971 caused prices of cattle hides to rise to historic highs. Since August 1971 retail shoe prices have been constrained under the Economic Stabilization Act (wage-price freeze). This Act put constraints on margins for tanneries, shoe manufacturers, and retailers. Then on July 15, 1972, cattle hide export controls were established under authority of the Export Administration Act of 1969 in a further effort to ease the pressure on prices of domestic leather and shoes.

To examine the effects of changes in cattle hide prices on shoe costs, this article traces the marketing system for cattle hides from slaughter plant to retail shoe store, using 2 price lines of men's oxford-style shoes. Data were obtained in June 1972 from 4 hide processors, 5 tanneries, 6 shoe manufacturers, and several trade associations. Where possible, the data are compared with those published in 1964<sup>1</sup>.

## Hide Processing

Hide processing, the first stage in the cattle hide market system, converts fresh hide to a brined, trimmed, fleshed, sorted, and graded product for sale to tanneries. Since 1964, brine curing in highly mechanized facilities "on stream" or near slaughter plants has replaced more expensive dry salting, as well as fleshing at many tanneries, lowering the cost of processing hides. Between 1964 and 1972, hide processing costs declined from 5.3 cents per pound to 2.6 cents, brined, fleshed, and trimmed basis (table 15). Brine curing costs currently represent only 7 percent of the market value of cured hide sold to tanneries, compared with 28 percent in 1964.

According to hide processors, a typical fresh hide from fattened beef cattle that weighs 75 pounds yields 48 pounds brine cured. The April-June 1972 market value of the cured hide was 39.2 cents per pound. Fresh hide value, the residual after subtracting the cost of curing, was 36.6 cents per pound of cured hide or 23.5 cents a pound fresh. Hides from older and leaner cattle and culls yield more but have a lower market value because of higher percentages of defects.

## Tanning Side-Upper Leather from Cattle Hide

According to tanners visited in June 1972, hide raw material costs amounted to about 60 percent (49 cents) of the total value of 81 cents per square foot of tanned leather, up from 40 percent 2 years ago and 50 percent in 1964. Monthly average prices of salted hide (Heavy Native Steer-Packer Hide) ranged from a low of 10.6 cents a pound in December 1970 to a high of 28.5 cents a pound in June 1972. In 1964, prices averaged 10.3 cents per pound<sup>2</sup>.

Tannery operating costs per square foot of leather rose only 7 cents (28 percent) between 1964 and 1972, mainly due to major capital improvements in automated equipment and process innovations. The upward shift in overhead expenses from about 8.3 to 13 cents a foot (table 16) was mostly caused by higher equipment costs per unit of leather produced. Overall, however, tannery labor costs have been kept low by improved productivity.

In 1972 tanners report that most leather is sold according to customer specified finishes, colors, and coatings. The cost of these special finishes (3-17 cents a

<sup>1</sup> Thompson, John W., "Marketing Spreads for Leather Products," *Marketing and Transportation Situation*, February 1965.

<sup>2</sup> From Pratt's Daily Hide and Leather Bulletin, Chicago, Ill.

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Table 15.--Value of cattle hides from processing, 1964 and 1972

Item	Value		Share of cured hide value		Change-- 1964 to 1972
	1964	June 1972	1964	June 1972	
	Cents per pound		Percent		Percent
Cured hide .....	18.8	<u>1</u> /39.2	100	100	109
Hide curing charge <u>2/</u> ...	5.3	2.6	28	7	-51
Fresh hide .....	13.5	<u>3</u> /36.6	72	93	171

1/ Brine cured, fleshed, and trimmed based on April-June 1972 average Packer HNS & LNC salted hide prices, Chicago, (61.5 pounds of salted hide at 30.6 cents a pound adjusted for salt, fleshing, trimming and sorting to 48 pounds of brine cured hide).

2/ Per pound of cured hide. Includes hide delivery, operating costs of brine cure, fleshing, trimming, sorting, and grading, plus profit.

3/ Value of 1.56 pounds of fresh hide needed to make 1 pound of cured hide.

Table 16.--Tanning costs for side-upper cattle hide leather per square foot, 1964 and 1972

Item	1964		1972		Change-- 1964 to 1972
	Cost	Share of leather price	Cost	Share of leather price	
	Cents	Percent	Cents	Percent	Percent
<u>Hide acquisition</u>					
Cured hide <u>1/</u> .....	22.56	45	47.04	58	109
Brokerage .....	2.44	---	.60	---	---
Freight .....			1.50	---	---
Total .....	25.00	50	49.14	61	97
<u>Tannery operations</u>					
Materials .....	<u>3/</u>	---	10.50	13	---
Labor .....	<u>3/</u>	---	8.50	10	---
Overhead, selling cost and profit .....	<u>3/</u>	---	13.00	16	---
Total .....	25.00	50	32.00	39	28
Price of Leather (TR) <u>2/</u> ...	50.00	100	81.14	100	63

1/ Cost of 1.2 lbs. of brine-cured, trimmed, and fleshed hide at 39.2 cents a pound (Table 15).

2/ TR leather = Tannery run mixture of Grades 1, 2 and 3 side-upper leather.

3/ Reported to be about one-third of total tannery operating costs.



square foot) is added to the price of basic (TR) leather. Customer specified finishes have raised prices of side-upper leather to shoe manufacturers more than any other factor except higher hide prices. Custom processed leather accounts for 60-80 percent of tannery sales, compared with under 25 percent in past years.

#### Shoe Manufacturing

Cost-components in table 17 are groupings of costs incurred by shoe manufacturers in making 2 styles of men's oxford shoes. One style, composite A, is a typical medium-priced casual shoe; the other, composite B, is a higher-priced traditional dress shoe. Over 1 million square feet of leather per year are used to make each style of shoe included in the composites. Manufacturers paid more for every component used in composite B shoe than for like components of the lower priced composite A shoe (table 17). Labor costs were higher for composite B because of greater skill and time required. Cutting and assembly of fewer parts as well as cementing instead of sewing soles to uppers made labor costs for casual composite A lower than for composite B. Selling costs (salesmen and salesroom activities) are 15-20 percent of factory selling prices, and account for more than half of the overhead and selling-cost component. Profit is "targeted" at 10 percent of selling prices. Since operating costs for these components are percentages of factory selling prices, they are higher for B than A.

The quantity and cost of side-upper and other leather used in shoes varies by styles, construction, design, size of components in sides and uppers, and the price per foot of leather. Even in the same type shoe, such as men's oxfords, these variations affect costs of leather per pair. In the examples shown, more parts from side-upper are used in the dress shoe than the casual shoe because of the difference in style and construction. Using prices of side-upper leather bought by shoe manufacturers from tanners 3 to 5 months earlier, leather costs amounted to \$2.03 for composite A shoes and \$2.56 for composite B shoes.

The time lag between hide and leather price changes and shoe price adjustments caused current factory prices

of shoes (table 17) to be lower than if current tannery prices for leather shown in table 16 had been used. On the basis of current side-upper leather prices from tanners, (81 cents per square foot), the factory outturn price of composite A would be \$10.38, or 48 cents more a pair. Composite B, which uses more side-upper leather of a higher quality and more finishing than composite A, would range from \$16.41 to \$16.78 (up 21 to 55 cents) a pair, if side-upper leathers ranging from 81 cents to 91 cents per square foot were used. These cost increases for shoes from higher leather prices will also cause higher operating costs due to the percentage markup effects on selling costs and profits, or another 5-14 cents a pair. Current higher prices of leather will be reflected in shoe prices for Spring 1973.

#### Retailing

Shoes are distributed by independent shoe retailers and through retail outlets owned by shoe manufacturers. The margin for retailing shoes, including delivery from factory, was reported in 1964 as 44.7 percent of the retail price. For 1972, the independent retailer's trade association reports that 50 percent is the regular retail margin. On this basis shoe A would retail for \$19.80 a pair and B at \$32.46.

However, under Price Commission regulations, retail firms that retail shoes and employ more than 60 persons, are not permitted to mark up retail prices of shoes on a fixed percentage basis. They can only raise shoe prices on a dollar-for-dollar, pass-through basis of costs from manufacturers or importers. For example, increased domestic prices of hides reflected in higher leather costs can be passed along in prices of shoes without constraint.

A price change of 1 cent per pound in cattle hide caused a corresponding change of 1.46 cents per square foot of side-upper leather. In the men's oxford examples, a change of 15 cents per pound in cattle hide prices (double the August 1971 price) would cause a materials cost increase of 66 cents a pair for composite A shoes and 75 cents for composite B shoes, or about 7 and 5 percent, respectively, of factory selling prices.





Table 17.--Manufacturing costs per pair of typical men's oxford shoes, June 1972

Item	Unit	Shoe styles	
		Composite A <u>1/</u>	Composite B <u>2/</u>
<u>Operating costs:</u>			
Labor .....	Dollars:	2.21	2.76
Overhead & selling .....	do. :	2.39	5.49
Profit .....	do. :	<u>.88</u>	<u>1.57</u>
Total .....	do. :	5.48	9.82
<u>Materials:</u>			
Side-upper leather			
footage <u>3/</u> .....	Sq. ft.:	3.04	3.42
price per square foot <u>4/</u> ..	Cents :	67	75
cost per pair .....	Dollars:	2.03	2.56
<u>Other parts: <u>5/</u></u>			
Mainly leather .....	Dollars:	1.39	1.82
Mainly non-leather .....	do. :	<u>1.00</u>	<u>2.03</u>
Total .....	do. :	2.39	3.85
Factory selling price .....	do. :	9.90	16.23

1/ Average of 4 men's oxford, casual or street wear shoe styles. Such shoes usually have some cement construction, partial linings, soft (smooth or sueded) leather uppers, and non-leather soles and heels.

2/ Average of 3 large-volume oxford-type men's dress shoe styles. These shoes have machine stitched seams, full linings, welted leather soles and heels, and full-grained, high quality, side-upper leather.

3/ Square feet of side-upper leather used per pair, including cutting waste. A and B include some side-upper leather usage in linings and tongues.

4/ Average inventory costs per square foot of side-upper leather reported by shoe manufacturers. (Prices reported represent costs of leather to make shoes for fall 1972.) Leather used in A ranged from 57 to 76 cents a square foot; B, from 70 to 81 cents.

5/ Includes all other material costs. In shoes, principal parts other than side-uppers are soles; heels, linings, tongues, innersoles, hardware, adhesives, and laces. Material costs for sale preparation include box, labels and tags, and the shipping container.

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